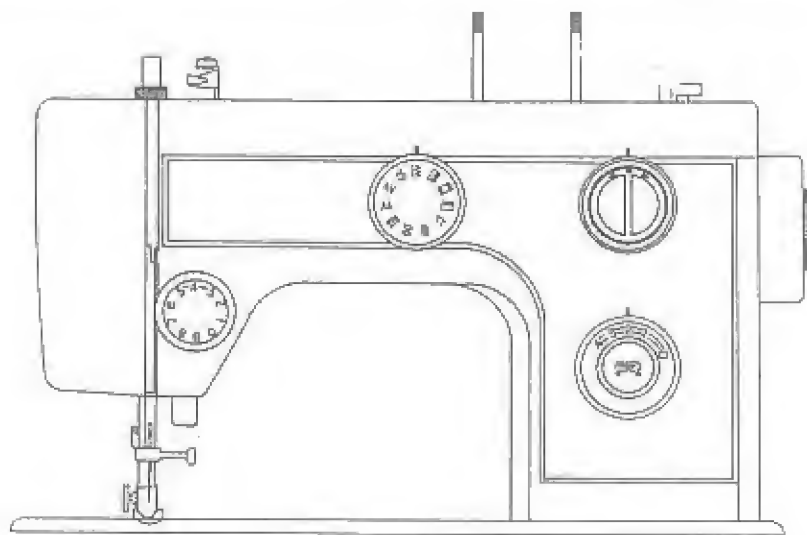


RICCAR

INSTRUCTION BOOK



**FLAT BED
MODEL- 900
SEWING MACHINE**

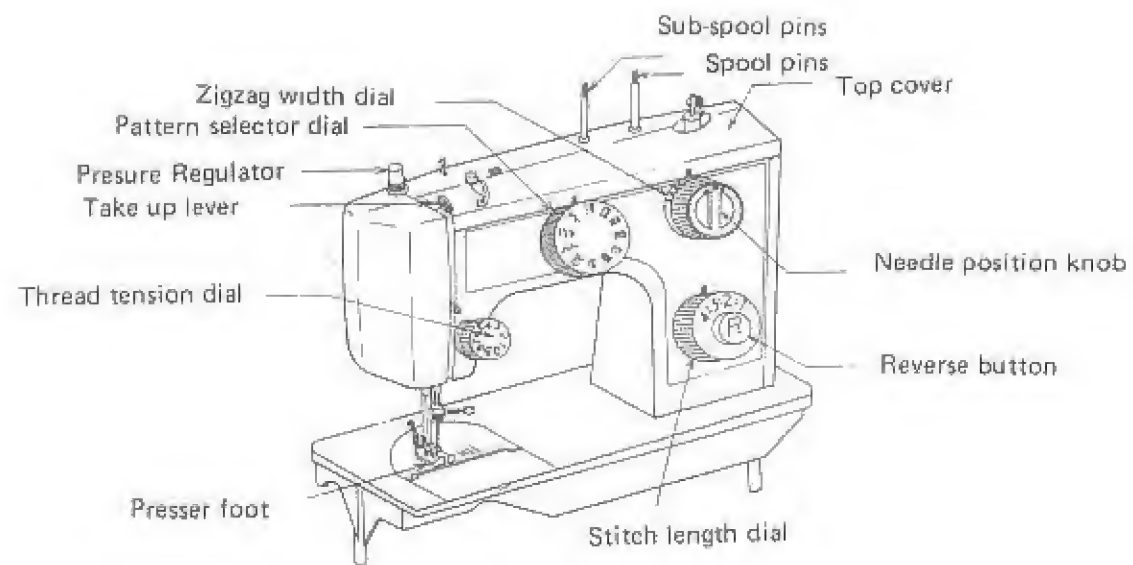
IBR900

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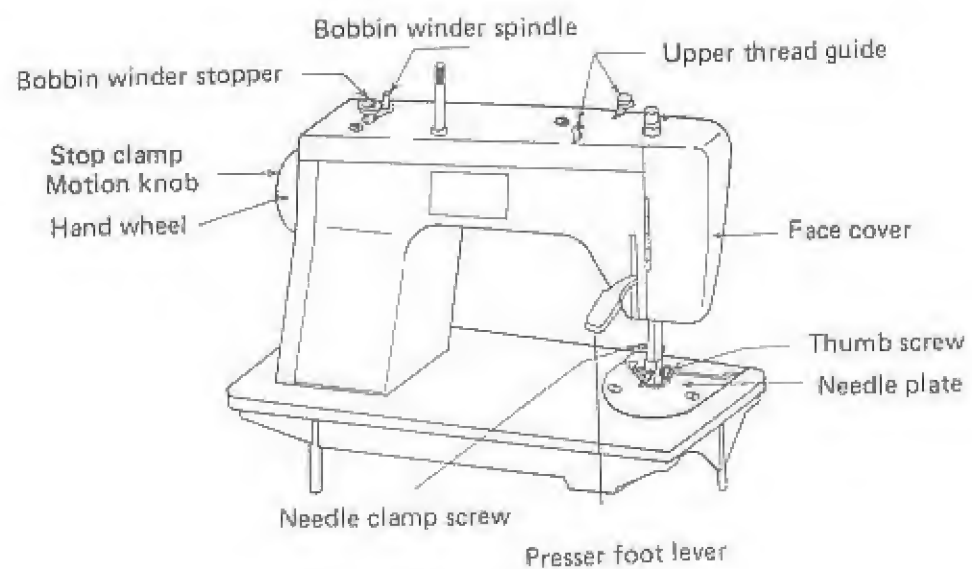
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NAME OF PARTS (FRONT SIDE)



(BACK SIDE)



ACCESSORIES



Bobbin



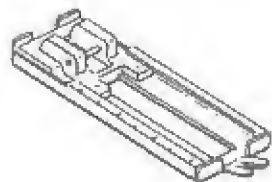
Felt



Zipper foot



Zigzag foot
(On machine)



Button hole foot



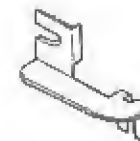
Button foot



Seam guide



Quilter



Hem guide



Button hole cutter



Machine Oil

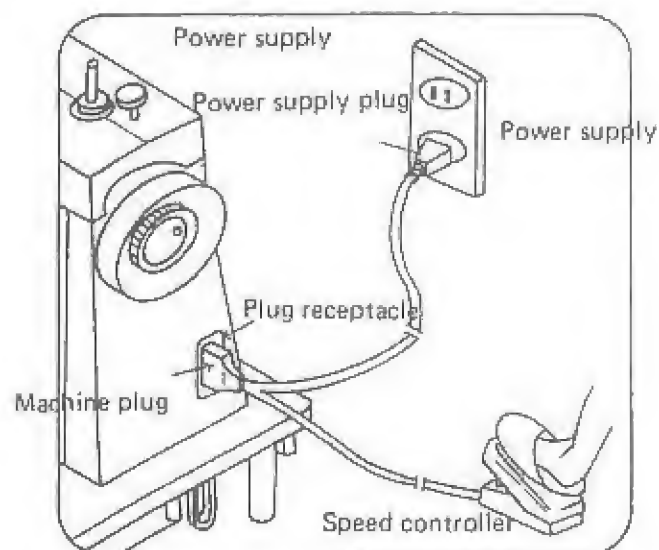


Screw driver
(Large & small)

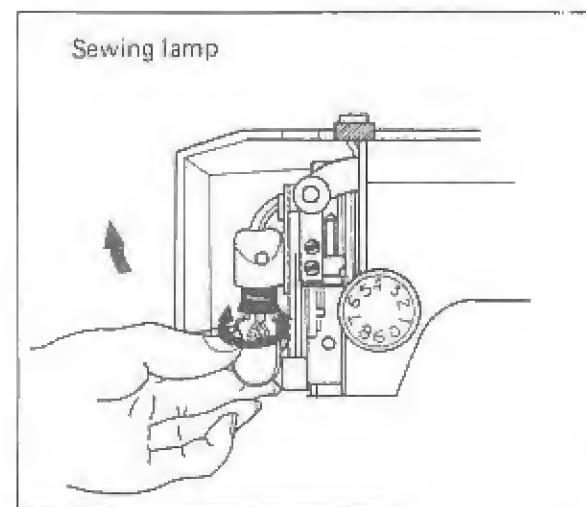


Needle
11 # 14

BEFORE SEWING

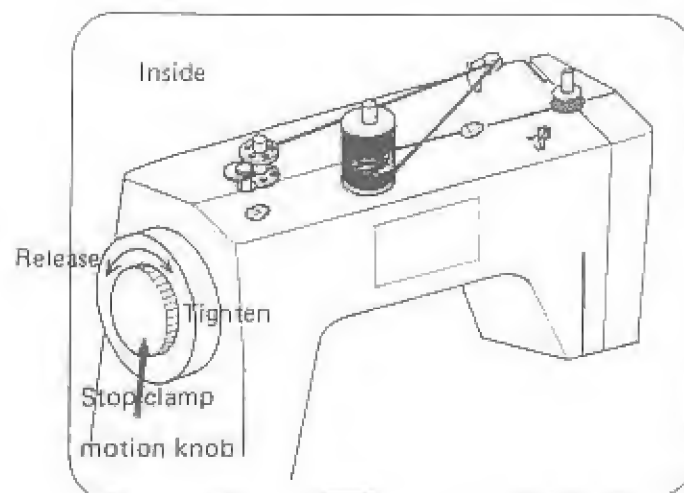


1. Fit the machine plug into the machine.
2. Plug the machine to the power supply.
3. Sewing speed can be varied by the speed controller.

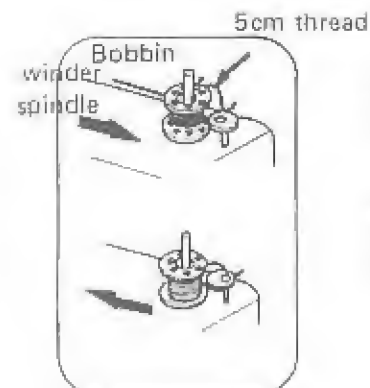


1. Remove or install bulb from inside of face cover.
2. Open face cover in direction of arrow.
3. Remove bulb by unscrewing it in counter clockwise.
4. Install a new bulb by screwing it in clockwise.
5. Use a screw type bulb with 220V/15W. (Max)

WINDING THE BOBBIN

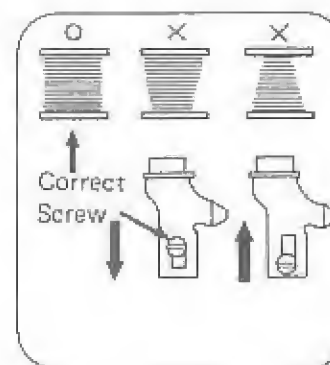


1. Release stop clamp motion knob.
2. Draw thread as shown.
3. When bobbin is filled, tighten stop clamp motion knob.



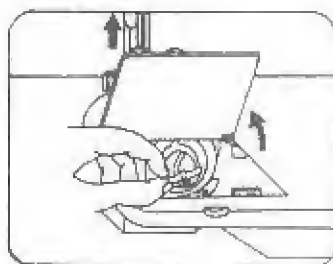
Push bobbin winder spindle in direction of arrow.

When bobbin winder is full, return spindle to original position.



When bobbin winder is not correct, release the screw of upper thread guide and adjust it until bobbin winder can make balance.

REMOVING BOBBIN CASE AND BOBBIN

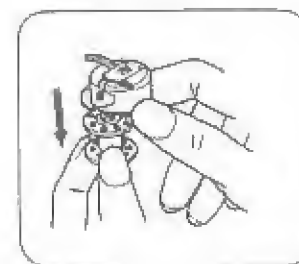


1. Raise needle to its highest position and open the shuttle race cover

Hinged latch

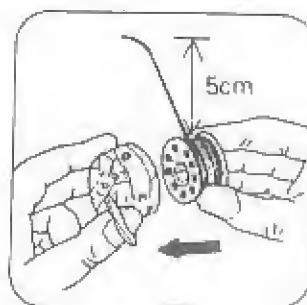


2. Open hinged latch of bobbin case and pull bobbin case out of machine.

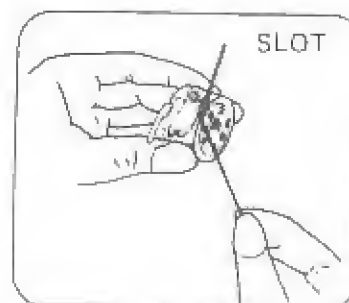


3. Release the latch and bobbin will fall out easily.

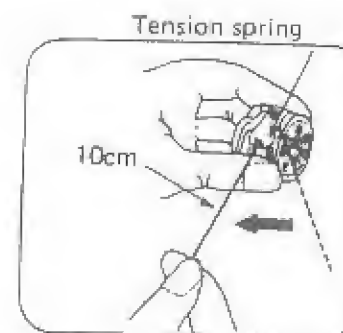
INSERTING BOBBIN INTO BOBBIN CASE



1. Pull off 5cm of thread from bobbin and insert it into bobbin case as shown.

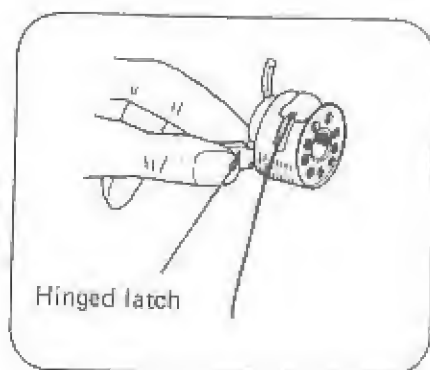


2. Guide the end of thread into slot.

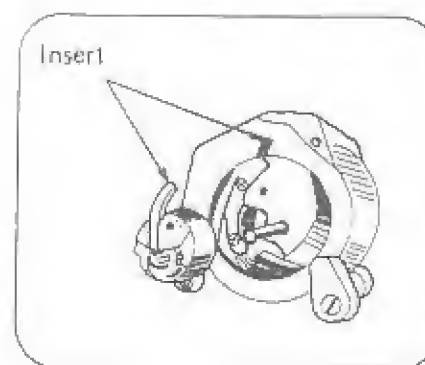


3. Pull thread through under tension spring and draw about 10cm of thread

INSERTING BOBBIN CASE INTO SHUTTLE RACE

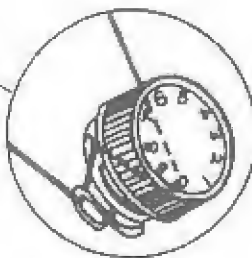
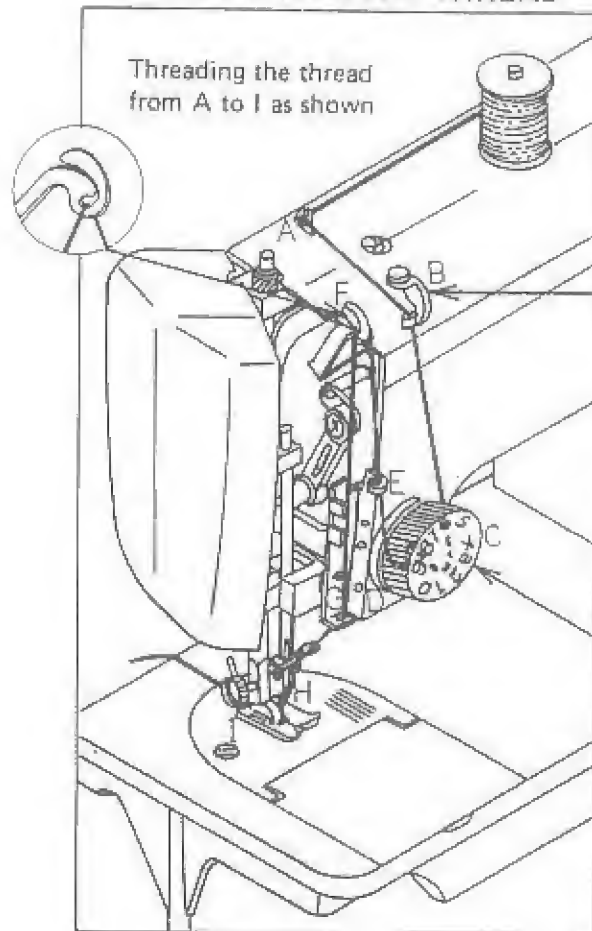


1. Raise needle to its highest position, pulling thread to the front, open the latch of bobbin case and hold it.

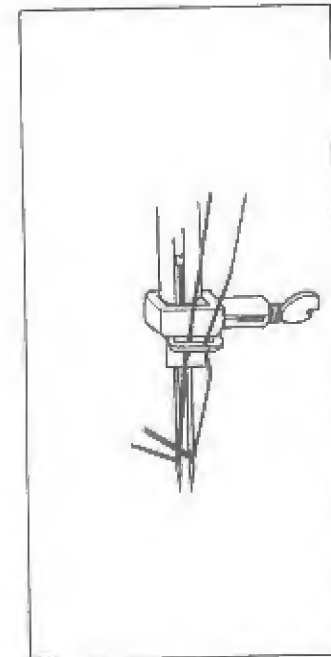
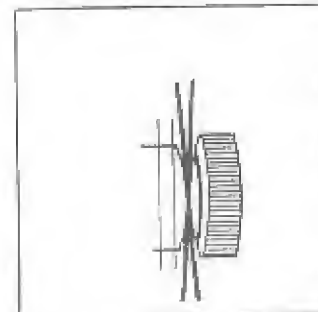


2. Holding latch open, bobbin case into shuttle race and release latch. Bobbin case should lock into place when latch is released.

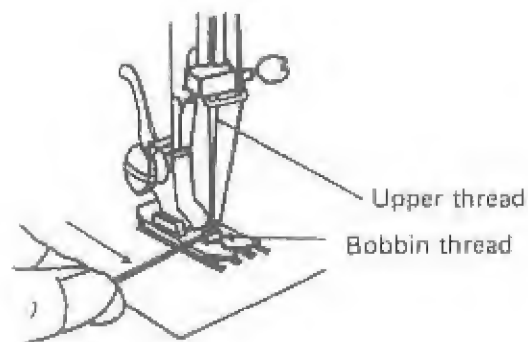
THREADING UPPER THREAD



Twin needle threading

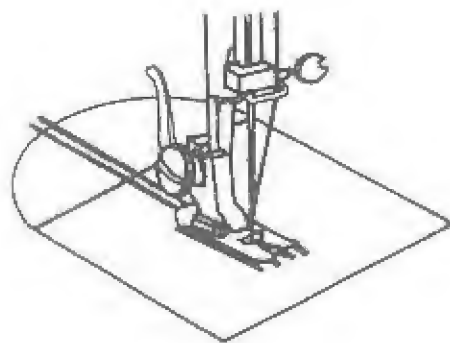


DRAWING UP BOBBIN THREAD



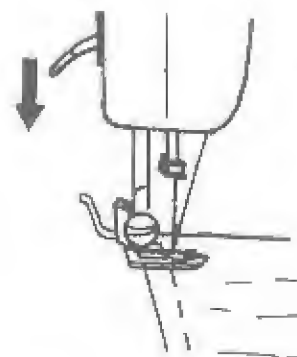
1. Hold upper thread with left hand, turn the hand wheel slowly towards you until the needle goes down and comes up. Then stop the hand wheel when the take-up lever is at its highest position.

Lightly draw up the upper thread and bobbin thread will be brought up in a loop.

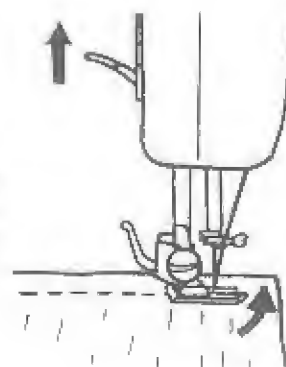


2. Pull out both threads and place them together under presser foot to the rear of machine.

CHANGING SEWING DIRECTIONS



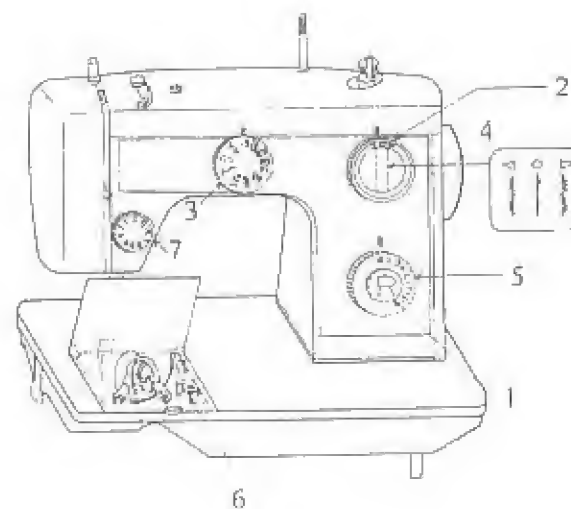
1. Needle down into fabric and raise presser foot, pivot the fabric around the needle to change direction as desired.



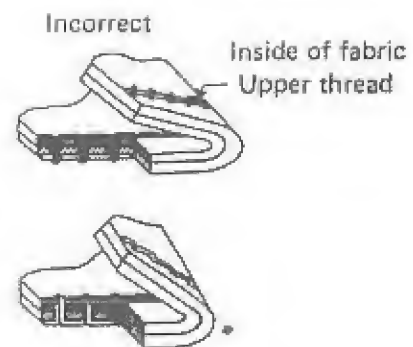
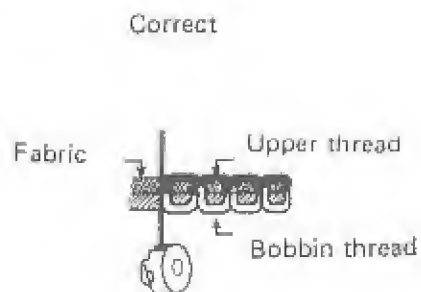
2. Put down presser foot and start to sew.

CONTROL DIAL

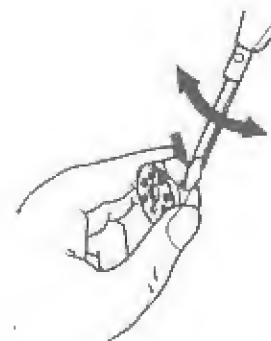
1. Reverse button
2. Zig-zag width dial
3. Pattern selector dial
4. Needle position knob
5. Stitch length dial
6. Drop feed lever
7. Thread tension dial



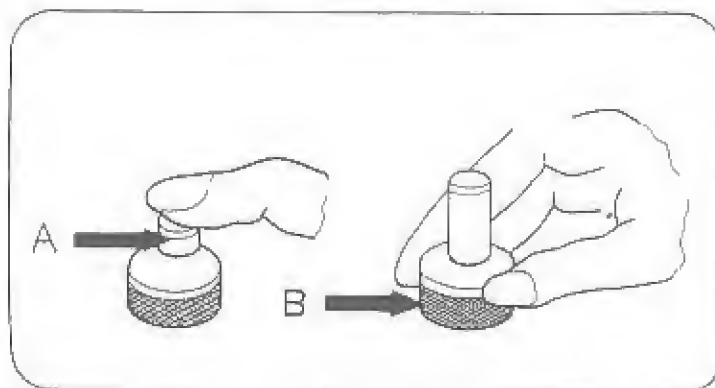
ADJUSTING THREAD TENSION



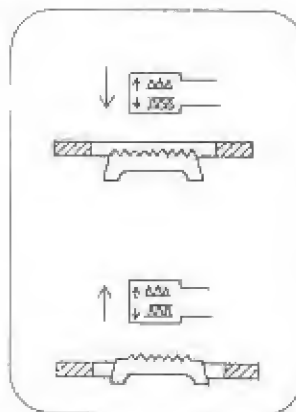
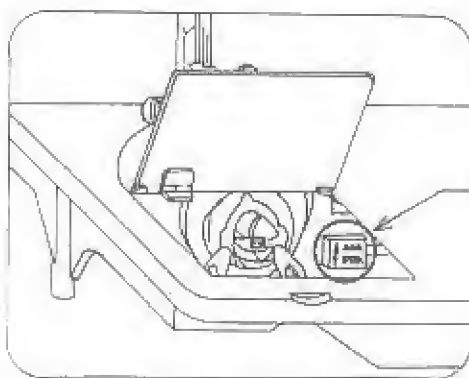
Upper thread tension may be adjusted by turning the thread tension dial.



REGULATING THE PRESSER FOOT PRESSURE



1. Push down inner pin (A) to increase pressure.
2. Push down outer ring to release the pressure.
3. According heavy, light materials or each kind of fabric, you can regulate the pressure.
4. For sewing embroidery, darning and others are free from any pressure.



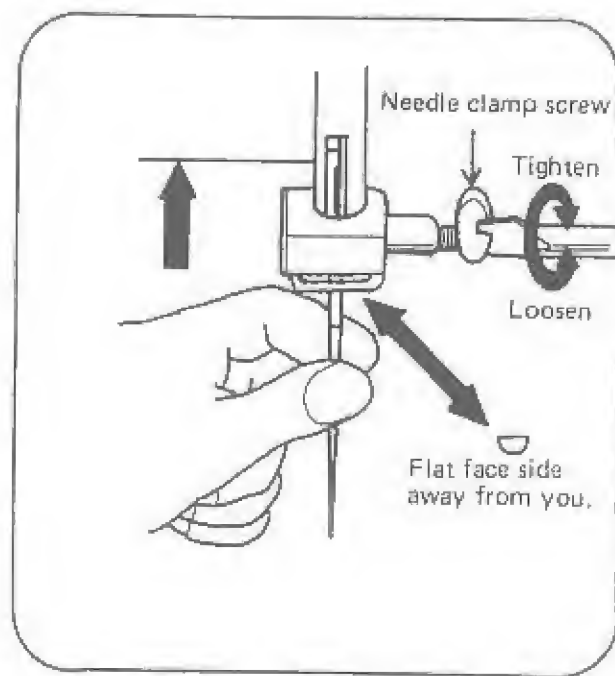
Push down in direction of arrow, the materials cannot be moved.

Embroidering.
(The materials cannot be moved.)

In normal sewing case, doing as show.

Normal sewing.
(Light, medium and heavy material)
















CHANGING NEEDLE



With needle flat face side away from you, push needle until it at the highest position and tighten the needle clamp screw firmly.

FABRIC · THREAD · NEEDLE TABLE

Please remember that the following list is connected with sewing way

	Fabric	Thread	Needle	Pressure of presser foot	Length of stitches		Indica- tion of tension
					ST.	ZZ.	
			 HA-1				
Light 	Nylon	80 Cotton	9		1-3	1-4	
	Tricot	60 S. Fiber					
	Silk	50 silk					
	Wool silk	50 S. Fiber Silk	11				
Medium 	Ging ham	60-80 Cotton	11-14		0.5 - 3	0.5 - 4	
	Thin Jersey	60 S. Fiber	11				
	Gabardine	50 Silk					
Heavy 	Denim	50 cotton	14-16		0.5 - 3	0.5 - 4	
	Jersey	50 S. Fiber	11-14				
	Tweed	50 Silk	11-14				

SEWING (PATTERN SELECTOR) AND OPERATION TABLE

	Operation Sewing way	Pattern	Needle position	Zigzag width	Stitch length	Presser foot	Drop feed
1	Straight stitch						
2	Zig-zag						
3	Full auto zig-zag						
4	Super Zig-zag						
5	Button hole						
6	Twin needle	except button hole					
7	Embroidery					No need	

TO START SEWING

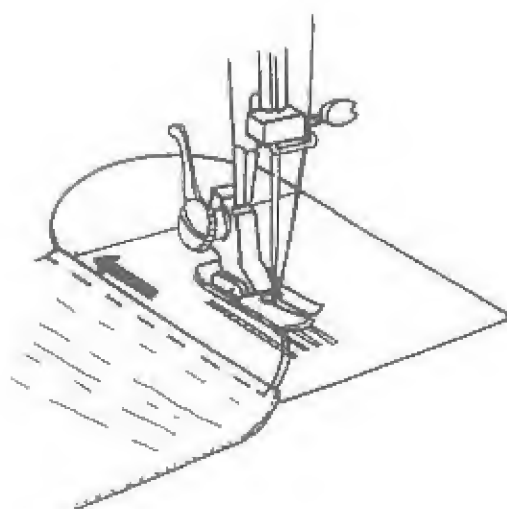
The important point of sewing.

1. Raise the take-up lever to its highest position and then threading thread correctly.
2. Threading upper and bobbin thread under the presser foot and draw about 10cm to the rear of the machine.
3. Fabric should be place under needle and put down presser foot.
4. Press speed controller and start to sew.
5. Test the machine stitch on a scrap of fabric you plan to use, adjusting the machine for the length of stitch and tension suitable to your fabric.

Attention.

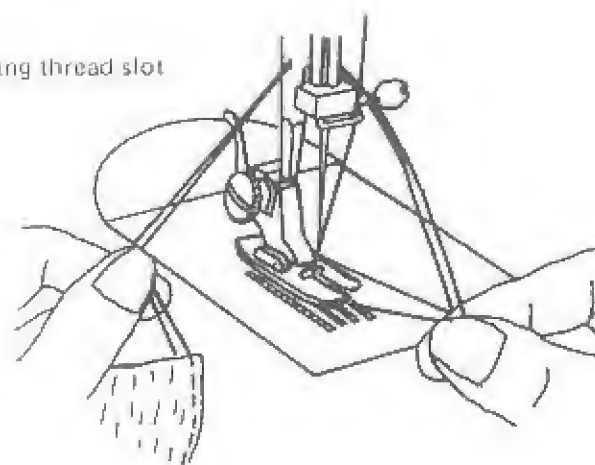
1. When turning the hand wheel manually, always turn it toward you.
2. Guide the cloth gently with your hand.
3. Stop sewing with needle in the fabric and do not turn zigzag width dial, needle position knob and pattern selection dial. (Breaking needle)

TO FINISH SEAM



1. Raise thread take-up lever to its highest position and presser foot stop at the top. Pull thread to the rear of machine.

Cutting thread slot



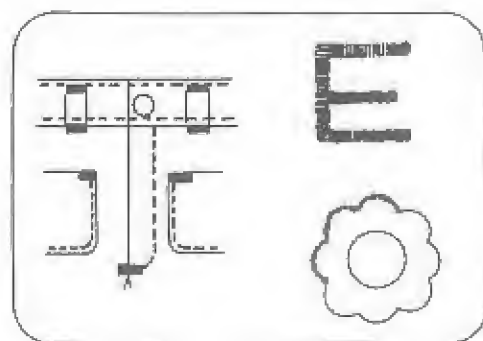
2. Pull off fabric with upper and bobbin thread, and cut thread as shown.

STRAIGHT STITCH

1. This type of stitching is the basic one and be used more frequently.
2. Can use both of straight or zig-zag presser foot.
3. For sewing light fabric, can make more successful find stitch if using straight foot.

(Remark: Please refer to Page 15 for setting way of dial)

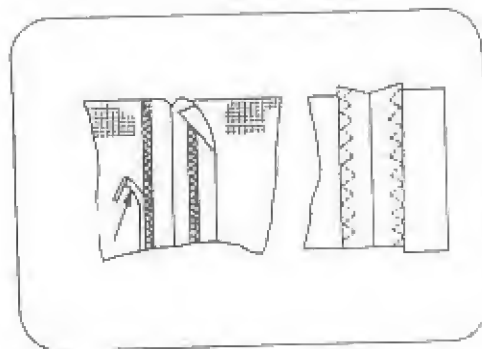
ZIGZAG SEWING



Pattern selector position

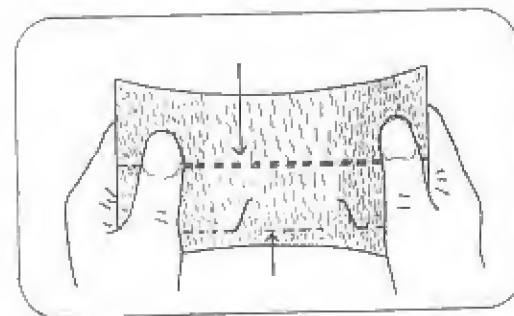
Satin stitches can be sew initial pattern, applique, pocket bar tacking strongly as shown.

OVERCASTING



In case of cutting light fabric, the edge of fabric will rolled easily. So, do not cut stitch after sewing reverse of fabric, but cut edge of fabric.

STRETCH STITCH

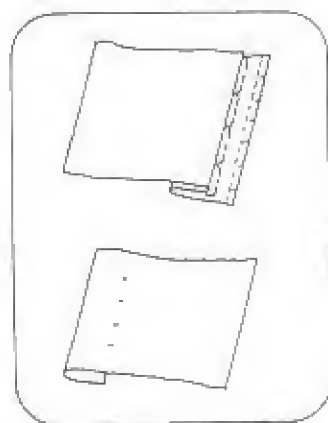
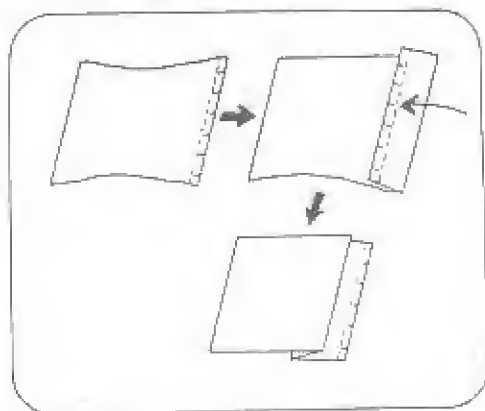


Use this stitch with knitted, tricot or other fabric.

The stitch enables you to press open your seam as with any straight stitched seam, stretch with fabric without breaking the thread.

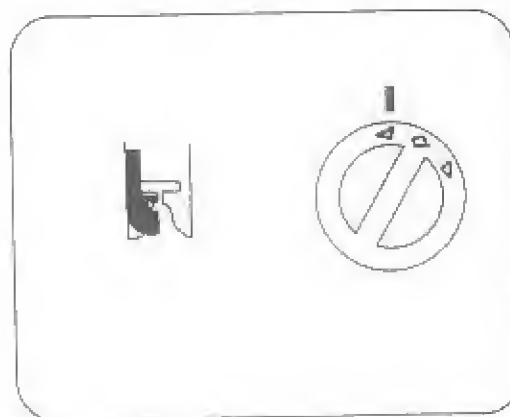
BLIND STITCH

1. Fold fabric as shown.

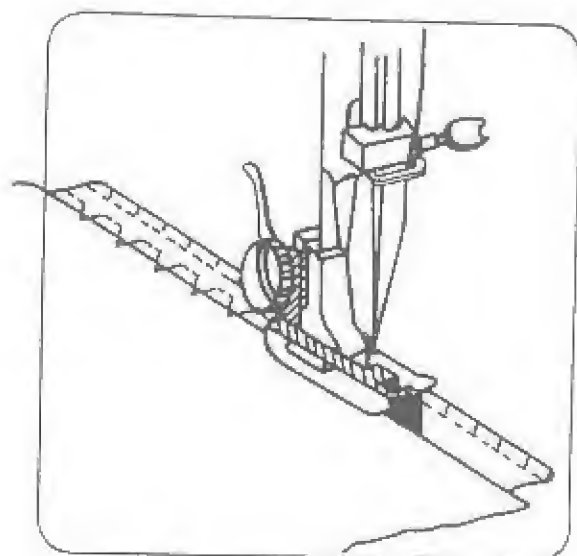


2. Turn needle position selector knob to the right and attach blind hem guide.

Tighten screw.

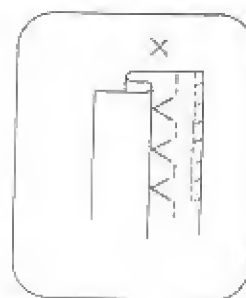


3. To finish seam as shown.



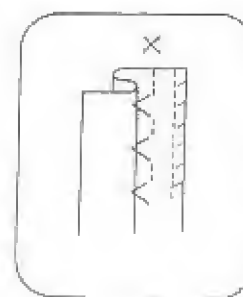
If sewing like (A) or (B), adjust zig-zag width and re-sew;

Needle is not catching edge of fold at all.



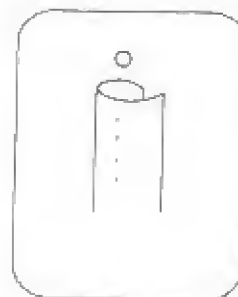
(A)

Needle is catching edge of fold too much.

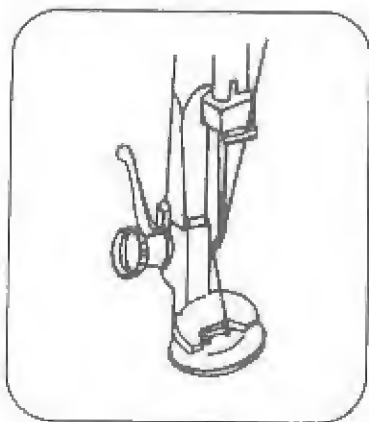


(B)

Correct seam,

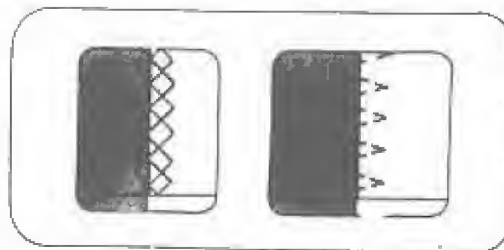


BUTTON SEWING



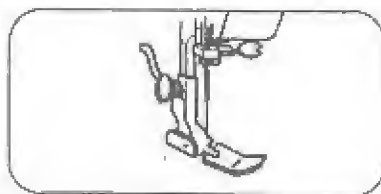
1. Turn needle position knob and set it in left side.
2. Lower drop feed and set button foot, when needle comes to left hole of button, lower foot.
3. Turn hand wheel and adjust zigzag width dial so that needle comes to right hole of button.
4. Sew about 7 stitches.
5. Draw out fabric, cut off thread and tie a knot on reverse of fabric.

CONNECTED SEWING

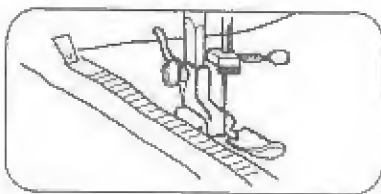


(Pattern selector dial position)

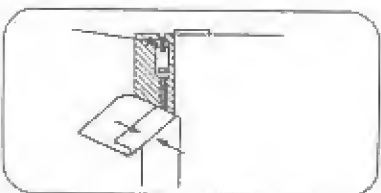
ZIPPER SEWING



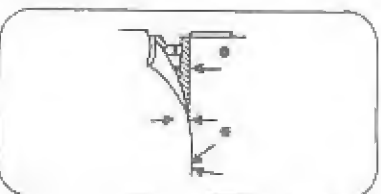
Raise the presser foot and raise the needle to its highest position by turning the hand wheel. Replace the foot with the zipper foot.



1. Fold the fabric about 2cm and place fabric under foot.
2. Zipper foot is designed to sew close to a raised edge preventing sewing on zipper.











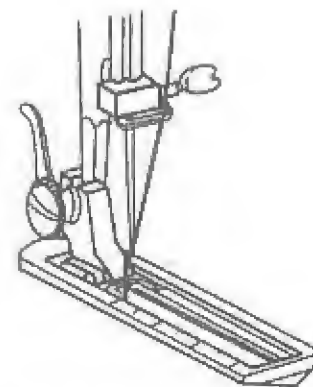
1. To sew the left side of the zipper, set the zipper foot on the left side of the needle.
2. To sew the right side of the zipper bring the foot to the right side of the needle.



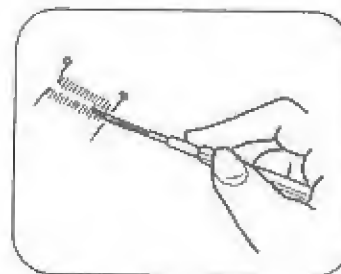
doing as shown.

BUTTON HOLE SEWING

Pattern selector dial	Step	Sewing way
 1		<ol style="list-style-type: none"> 1. Set dial to "1" position. 2. Sew left side. 3. Raise the needle on the fabric.
 2		<ol style="list-style-type: none"> 4. Set dial to "2" position. 5. Sew 5-6 stitches. 6. Raise the needle on the fabric.
 3		<ol style="list-style-type: none"> 7. Set dial to "3" position. 8. Sew right side. 9. Raise the needle on the fabric.
 4		<ol style="list-style-type: none"> 10. Set dial to "4" position. 11. Sew 5-6 stitches. 12. Raise the needle on the fabric.

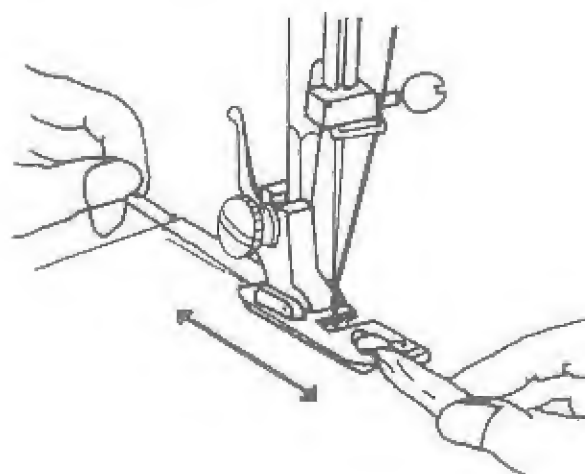
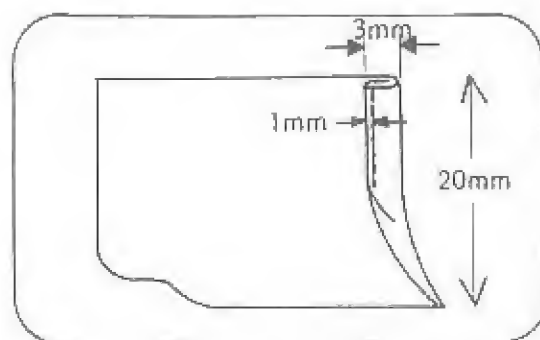


Before set fabric, pull BH foot as shown.



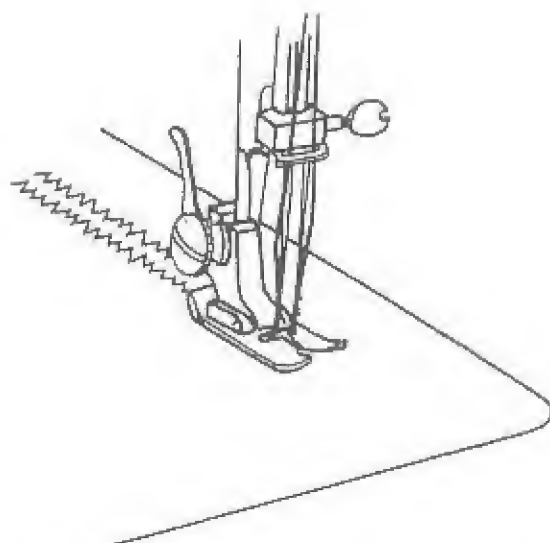
Cutting buttonhole along centre with cutter as shown and do not cut stitch.

HEMMING

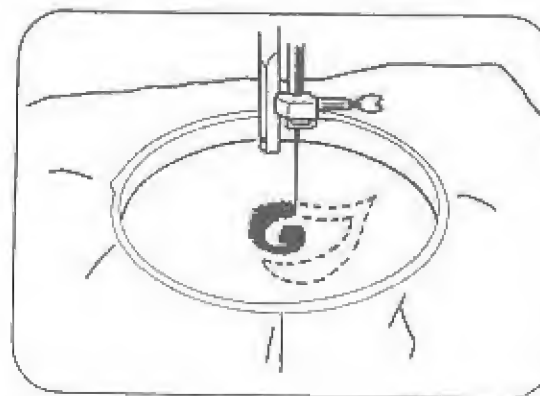


1. Raise the foot and the needle to its highest position. Replace the foot with the hemmer foot.
2. Fold over the fabric edge by about 3mm and place it under the foot. Secure the folded edge with a few stitches. Take out the workpiece and draw the hem into the hemmer foot by pulling the threads.
3. Lower the foot and sew the hem.
4. During sewing, fold the fabric to the left a little and allow it to run into the hemmer foot.
5. Make sure that the fabric does not move under the right half of the foot. The fabric must be fed into the scroll of the hemmer sufficiently so that the workpiece edge runs freely through the groove under the foot.

TWIN NEEDLE



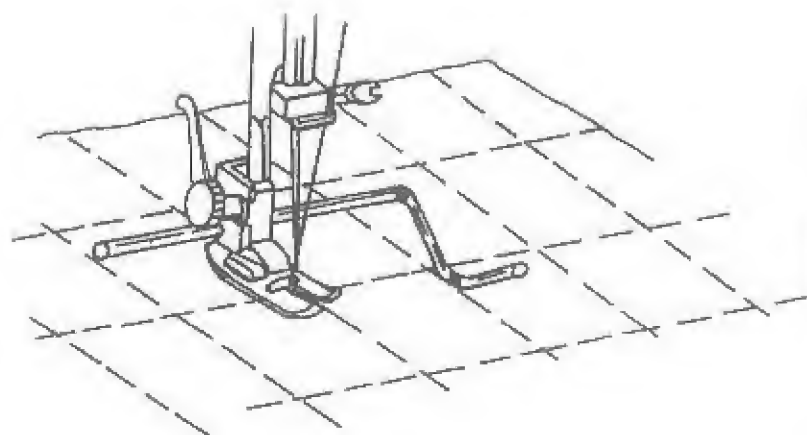
EMBROIDERY



Thread machines as for normal sewing ensuring that use is made of the left and right needle bar guides.

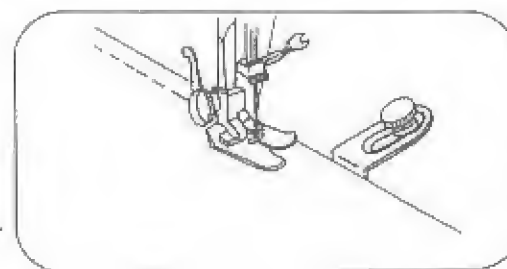
NB. Sewing width should be between 0 and twin needle marked on zig-zag width dial, exceeding this will result in breaking of needles.

QUILTER



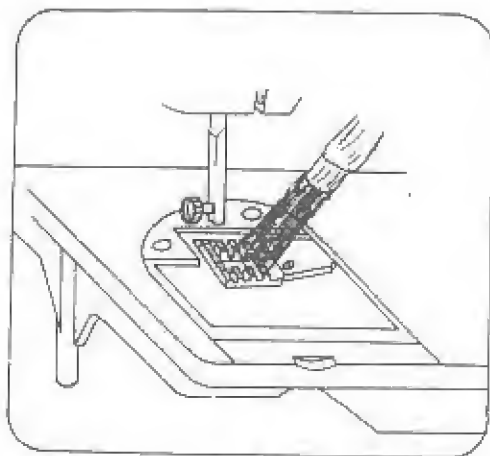
1. Insert supporter of quilter.
2. Move quilter and adjust stitch distance.

SEAM GUIDE

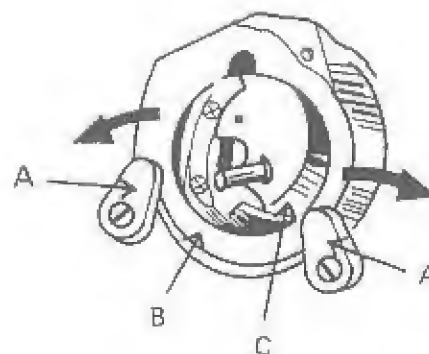


1. Use seam guide when sewing a long seam of regular distance from edge of material.
2. Set guide in hole on bed, at right of needle plate, and adjust distance.
3. Run machine with edge of material touching guide. Position cloth guide at an angle to sew a curved seam.

MAINTENANCE (CLEANING AND OILING)

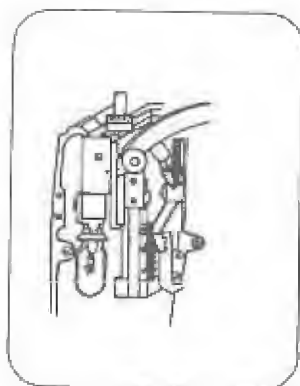


Cleaning feed dog



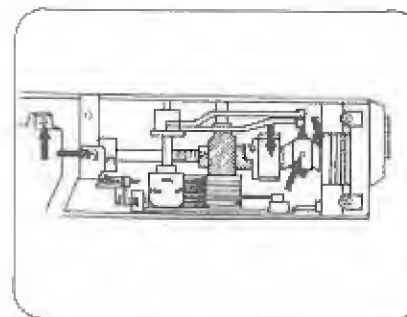
Cleaning shuttle race
(A) Latch knob
(B) Shuttle race cover
(C) Shuttle hook

1. Raise needle to its highest position.
2. Take out bobbin case.
3. Turn latch knob A as shown.
4. Take off shuttle race cover.
5. Take off shuttle hook.
6. Cleaning inside dust of shuttle race and oiling shuttle hook, then replace it into the machine.

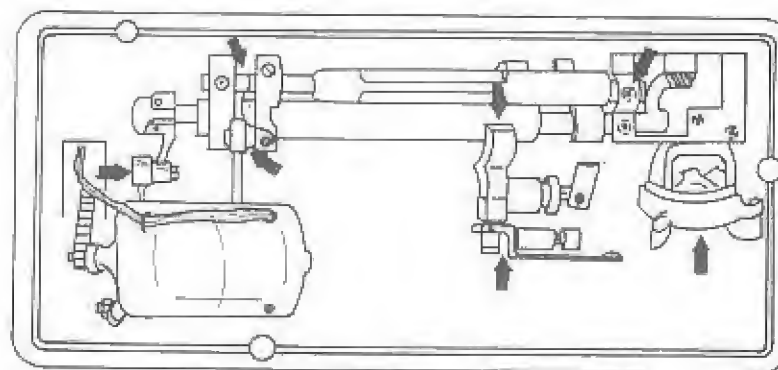


Open face cover and oil points indicated.

Open top cover and oil points indicated.



Oil points indicated on underside of bed base.



CHECKING PERFORMANCE PROBLEMS WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Fabric not moving	<ul style="list-style-type: none"> - Feed dog down. - Machine not moving. - Stitch length dial in 0 position. - Light pressure on presser foot. 	<ul style="list-style-type: none"> - Raise feed dog. - Moving stop motion. - Moving dial to 1-4. - Increase pressure on presser foot.
Breaking Needle	<ul style="list-style-type: none"> - Incorrect setting of needle. - Needle bent. - Pulling fabric. - Incorrect using needle, thread and fabric. 	<ul style="list-style-type: none"> - Reset needle. - Replace new needle. - Do not pull fabric. - Correct using needle, thread, and fabric.
Breaking Upper Thread	<ul style="list-style-type: none"> - Incorrect position of zigzag width dial. - Improper threading. - Tight upper thread tension. - Needle bent. - Nicks or burrs on shuttle. 	<ul style="list-style-type: none"> - Moving to correct position. - Rethread machine. - Loosen upper thread tension. - Replace new needle. - Replace shuttle, or polish off burrs completely.
Breaking Bobbin Thread	<ul style="list-style-type: none"> - Tight bobbin thread tension. - Incorrect setting of needle. - Improper threading. - Dust and thread in shuttle. 	<ul style="list-style-type: none"> - Loosen bobbin thread tension. - Reset needle. - Rethread machine. - Clean shuttle.
Machine Jamming Knocking Noise	<ul style="list-style-type: none"> - No oil. - Dust and thread in shuttle. 	<ul style="list-style-type: none"> - Need oil. - Clean shuttle.
Puckering	<ul style="list-style-type: none"> - Tension too tight. - Sewing foot pressure too strong. - Incorrect using fabric, needle, and thread. 	<ul style="list-style-type: none"> - Reset. - Regulating sewing foot pressure. - Correct using fabric, needle and thread.